

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/809,736	03/25/2004	James M. Hayes		8184	
31083 75	90 08/11/2006		EXAMINER		
THOMTE, MAZOUR & NIEBERGALL, L.L.C.			SINGH, RAMNANDAN P		
2120 S. 72ND S OMAHA, NE	STREET, SUITE 1111 68124		ART UNIT	PAPER NUMBER	
O			2614		
			DATE MAILED: 08/11/200	6	

Please find below and/or attached an Office communication concerning this application or proceeding.

·							
Office Action Summary		Application No. Applicant(s)					
		9,736	HAYES ET AL.				
Office Action Summar	Exam	iner	Art Unit				
		andan Singh	2614				
The MAILING DATE of this com Period for Reply	ımunication appears on	the cover sheet with t	the correspondence a	ddress			
A SHORTENED STATUTORY PERIOD WHICHEVER IS LONGER, FROM THE - Extensions of time may be available under the proafter SIX (6) MONTHS from the mailing date of this - If NO period for reply is specified above, the maxin - Failure to reply within the set or extended period for Any reply received by the Office later than three meanned patent term adjustment. See 37 CFR 1.70	HE MAILING DATE OF visions of 37 CFR 1.136(a). In n s communication. num statutory period will apply a preply will, by statute, cause the onths after the mailing date of the	THIS COMMUNICATION OF	TION. be timely filed from the mailing date of this of DONED (35 U.S.C. § 133).				
Status							
1) Responsive to communication(s) filed on 25 March 20	104					
2a)☐ This action is FINAL .							
<u> </u>							
• • • • • • • • • • • • • • • • • • • •	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	Tours and Expans	Quay.o, 1000 O.B. 1	1, 400 0.0. 210.				
<u> </u>	the application						
	Claim(s) <u>1-28</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	13/are withdrawn hom	Consideration.					
6)⊠ Claim(s) <u>1-28</u> is/are rejected.							
7) Claim(s) is/are rejected.							
8) Claim(s) are subject to re		an roquiroment					
oj Claim(s) are subject to h	sometion and/or election	m requirement.					
Application Papers							
9)⊠ The specification is objected to I	by the Examiner.						
10)⊠ The drawing(s) filed on <u>25 Marc</u>	<u> </u>	cepted or b) object	ed to by the Examine	er.			
Applicant may not request that any							
Replacement drawing sheet(s) incl				FR 1.121(d).			
11) The oath or declaration is object							
Priority under 35 U.S.C. § 119							
12) ☐ Acknowledgment is made of a c	laim for foreign priority	under 35 U.S.C. & 11	9(a)-(d) or (f)				
a) ☐ All b) ☐ Some * c) ☐ None			(4) (4) 5. (.).				
<u> </u>		been received.					
	 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 						
3.☐ Copies of the certified co				l Stage			
application from the Inter				· Clago			
* See the attached detailed Office			eived.				
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Attachment(s)							
Notice of References Cited (PTO-892)		4) Interview Summ					
 Potice of Draftsperson's Patent Drawing Revi Information Disclosure Statement(s) (PTO-14 			ail Date nal Patent Application (PT	(O.152)			
Paper No(s)/Mail Date	49 OF F 1 O/3 D/U 0)	6) Other:	na ratent Application (PT	O-192)			

Application/Control Number: 10/809,736 Page 1

Art Unit: 2614

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because Fig.4 does not provide legends required to explain the figure..

Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

The specification states: "the ability to detect the return of SIT tones" on page 7,

line 1. Write the full word for the acronym, "SIT".

Appropriate correction is required.

Claim Objections

3. Claims 8-9 and 25-26 are objected to because of the following informalities:

Claim 8 recites "processor to identify **SIT** tones " in line 2. The use of the acronym "**SIT**" in the claim is improper. Write the full word for "SIT". A similar thing holds for claims 9, 25 and 26.

Appropriate correction is required.

Application/Control Number: 10/809,736 Page 2

Art Unit: 2614

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Dans [US 6,195,417 B1].

Regarding claim 1, Dans teaches a system (10) for automatically classifying a list of telephone numbers into one or more categories (i.e. banks) shown in Fig. 1 [col. 4, line 58 to col. 5, line 5], the system comprising:

a processor (i.e. scheduler 28) [col. 5, lines 36-52];

a data storage medium (26) for at lest temporarily storing the list of telephone numbers on a line within the telephone network [col. 5, lines 29-35]; and

the software operative of the processor to:

- a) initiate calls to telephone numbers from the list of telephone numbers on a line within the telephone network [col. 5, line 60 to col. 6, line 4; Fig. 2];
- b) receive and identify audible sounds (or messages) on the line [col. 6, line 21 to col. 8, line 46; Fig. 2]; and
- c) assign one or more of the categories (i.e. banks) to each of the telephone numbers according to the audible sounds [col. 8, line 47 to col. 9, line 33; col. 11, line 37 to col. 13, line 29; Figs. 1-6].

Art Unit: 2614

Regarding claim 2, Dans further teaches the system, wherein the software is further operative on the processor to create a data file (i.e. state machine 40) comprising the telephone numbers and the identity of the category (i.e. bank) assigned to each of the telephone numbers [Fig. 1; col. 5, line 60 to col. 6, line 32; col. 10, line 47 to col. 11, line 35].

Regarding claim 3, Dans further teaches the system, wherein the software is operative on the processor to generate reports based on the data file (i.e. state machine 40) [col. 11, lines 16-35].

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 4-7, 10-24, 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dans as applied to claim 1 above, and further in view of Suhm et al [US 6,823,054 B1].

Regarding claim 4, although Dans teaches using a software package (i.e. a computer program) including a speech recognition system, called VISUAL VOICE, which is responsible for actions requested by the state machine (40) col. 8, lines 17-46]; he does not disclose the details for voice dialog between the processor and a callee. So one of

ordinary skill in the art would have been motivated to seek any embodiment that discloses details of analyzing the automated response of the state machine, such as Suhm et al.

Suhm et al teach a system for analyzing an interactive voice response (IVR) software of a processor to determine a complete sequence of events occurring within the IVR system, wherein the IVR system is operable to automatically accept calls from callers and respond to input from callees on the line, enabling the processor to play an audible message over the line that requests a specific response from a callee on the line [Fig. 3D; col. 9, lines 58-67; col. 14, lines 21-45; col. 15, lines 49-57; col. 16, lines 12-43].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Suhm et al with Dans in order to enable the program to run interactively in response to the caller's spoken words [Suhm et al; col. 14, lines 43-45].

Regarding claim 5, Suhm et al teach the system having a call termination mode of the contact that responds to an automation message [Fig. 5; col. 14, lines 31-42; col. 18, line 64 to col. 19, line 9; col. 19, line 62 to col. 20, line 13].

Regarding claims 6-7, Suhm et al teach the system, wherein the software is further operative to the processor to classify the telephone numbers as live answered or not live-answered [col. 5, line 64 to col. 6, line 8; col. 9, lines 58-67; col. 10, line 63 to col. 11, line 25; col. '8, line 64 to col. 19, line 9].

Printed: 01

12/2006

CLM

Application/Control Number: 10/809,736

Art Unit: 2614

8097'36 Page 5

1

Regarding claim 10, Dans further teaches the system, as shown in Fig. 6, wherein the software (i.e. scheduler) is further operative on the processor to initiate calls to the not live-answered telephone numbers on a line within the telephone network and receive audible sounds on the line [Fig. 6; col. 13, lines 31-58; col. 14, lines 15-38].

5

Regarding claim 11, Dans further teaches the system, wherein the software is further operative on the processor to compare the audible sounds to one or more known audible sounds to sub-classify the not live-answered telephone numbers [col. 19, lines 47-50].

to

Regarding claim 12, Dans further teaches the system, wherein the known audible sounds are comprised of at least portions of spoken messages [col. 19, lines 41-46].

15

Regarding claim 13, Dans further teaches the system, wherein the spoken messages are comprised of separate messages advising that a telephone number is disconnected, has been changed, or is privacy blocked [Fig. 6; col. 14, lines 38-67].

20

Regarding claim 14, Dans further teaches the system, wherein the spoken messages are comprised of separate messages advising that all circuits are busy or that an area code has changed [col. 14, lines 54-62; col. 15, lines 15-17].

Application/Control Number: 10/809,736

Art Unit: 2614

Regarding claim 15, Suhm et al further teach the system, wherein the spoken messages are comprised of common corporate and answering system greetings [col. 31, lines 48-62; col. 35, lines 26-38].

Regarding claim 16, Dans further teaches the system, wherein the software is further operative on the processor to identify and classify a telephone number from which audible sounds are received that are not similar to the one or more known audible sounds [col. 14, lines 15-37].

Regarding claim 17, Dans further teaches the system, wherein the software is further operative on the processor to create a data file comprising the not answered telephone numbers and a sub-classification for each of the not live-answered telephone numbers based on the one or more known audible sounds [col. 15, line 50 to col. 16, line 3].

Regarding claim 18, Dans further teaches the system, wherein the software is further operative on the processor to generate reports based on the data file [col. 16, lines 4-14].

50

Printed: 01 12/2006

CLM

Application/Control Number: 10/809,736

Page 7

Art Unit: 2614

Regarding claim 19, Dans further teaches the system wherein said software is further operative on said processor to at least temporarily store said audible sounds received over said line on said data storage medium prior to identifying said audible sounds [Fig. 6; col. 13, lines 51-58].

Regarding claim 20, Dans further teaches the system wherein said software is further operative on said processor to complete said call after receiving and storing said audible sounds but prior to identifying said audible sounds [col. 14, lines 15-23].

Regarding claim 21, Suhm et al further teaches the system, wherein said software is further operative on said processor to play an audible message over said line that requests a specific response from a callee on said line [Fig. 3D; col. 9, lines 58-67; col. 14, lines 21-45; col. 15, lines 49-57; col. 16, lines 12-43].

Regarding claim 22, Suhm et al further teaches the system, wherein said audible message requests that a callee on said line terminate said call [Fig. 5; col. 14, lines 31-42; col. 18, line 64 to col. 19, line 9; col. 19, line 62 to col. 20, line 13].

Regarding claims 23-24, Suhm et al teach the system, wherein the software is further operative to the processor to classify the telephone numbers as live answered or not live-answered [col. 5, line 64 to col. 6, line 8; col. 9, lines 58-67; col. 10, line 63 to col. 11, line 25; col. '8, line 64 to col. 19, line 9].

t20

5

Art Unit: 2614

Regarding claim 27, Dans further teaches the system, wherein the software is further operative on the processor to compare the audible sounds to one or more known audible sounds to sub-classify the not live-answered telephone numbers [col. 19, lines 47-50].

Regarding claim 28, Dans further teaches the system, wherein the known audible sounds are comprised of at least portions of spoken messages [col. 19, lines 41-46].

15

8. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dans as applied to claim 1 above, and further in view of Brown et al [US 20030086541 A1].

Regarding claim 8, Dans does not teach expressly the system wherein the software is further operative on the processor to identify standard information tones (SIT) on line after initiating the calls.

Brown et al teach a tone detector (203) to detect SIT tones on line after initiating the calls [Figs. 3C, 5; Para: 0035].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Brown et al with Dans in order to classify audio samples based on the identification of tones [Brown et al; Para: 0035].

Regarding claim 9, Brown et al further teach classifying the telephone numbers as not live-answered (i.e. recorded voice) when the Sit is identified [Para: 0002].

Page 9

9. Claims 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Dans and Suhm et al as applied to claim 19 above, and further in view of Brown et al [US 20030086541 A1].

Regarding claim 25, Dans does not teach expressly the system wherein the software is further operative on the processor to identify standard information tones (SIT) on line after initiating the calls.

Brown et al teach a tone detector (203) to detect SIT tones on line after initiating the calls [Figs. 3C, 5; Para: 0035].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Brown et al with Dans in order to classify audio samples based on the identification of tones [Brown et al; Para: 0035].

Regarding claim 26, Brown et al further teach classifying the telephone numbers as not live-answered (i.e. recorded voice) when the Sit is identified [Para: 0002].

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Zhang et al [US 6,993,119 B1] teach using an enunciation module(44) in conjunction with automatic speech recognition (46) and DTMF decoder (42) [Fig. 2; col. 6, lines 27-62; Abstract].

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (571) 272-7529. The examiner can normally be reached on M-TH (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/809,736

Art Unit: 2614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramnandan Singh Examiner

Page 11

Art Unit 2614